

Appl. No. 10/537,893
Amd. Dated November 7, 2006
Reply to Office Action Dated August 7, 2006

Amendments to the Drawings:

The attached replacement sheet includes changes to Figure 1A. This sheet 1/8, which includes Fig.1 and Fig.1A, replaces the original sheet including Fig. 1 and Fig. 1A. In figure 1A, previously omitted elements S1a-S1d and S2a-S2d have been added. These reference signs were mentioned in the description. No new matter is added.

Attachment: Replacement sheet.

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Remarks/Arguments

Please reconsider the application in view of the above amendments and the following remarks. Claims 1 and 6 have been amended. Claims 2-5 and 7-19 remain in this application. It is believed that no new matter has been added by way of any the amendments provided herein.

I. Drawings objections under 37 CFR 1.84(p)(5)

Applicant has amended the drawing sheet 1/8 in order to include the missing references signs S1a-S1d and S2a-S2d into Figure 1A.

II. Claims Rejections under 35 USC §101

Examiner rejected claims 1-19 under 35 USC 101 because the claimed invention was directed to non-statutory subject matter.

Applicant has amended claims 1 and 6 in order to better reflect how the method produces a result that can be used in a tangible manner. Actually, the method according to the invention provides a very significant and essential result when seeking to use data acquired within a well bore since the method according to the invention permits to depth match a plurality of data sets. When seeking to provide indications of oil-bearing or gas-bearing strata in the earth, it is essential that a method is provided to depth match the various measurements that are taken by way of multiple sensors during a single pass through the borehole, or taken during different passes through the same borehole. Without accurate depth correlation method, the data sets would be basically useless.

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Therefore, the method according to the invention aims at providing a result that can be used in a very tangible manner, i.e. that can permit to interpret data measurements sets and then come to an understanding of the borehole wall configuration.

III. Claims Rejections under 35 USC §102

Examiner rejected claims 6-7 and 16-19 under 35 USC 102(b) as being anticipated by Kerzner (US 4,517,835). Applicant respectfully disagrees with the Examiner in this regard and presents the distinctions below.

Claim 6 relates to a method for matching a plurality of data sets from boreholes or core sections using correlation of two average signals corresponding to a two-dimensional data set.

Kerzner discloses a method for matching a plurality of curves (23A, 25A) obtained from sensors (23-26). The curves are processed in order to obtain "activity functions" (23B, 25B) - see column 8, line 42 to column 9, line 3. To compare the curves 23A and 25A the derivatives of each curve are compared - see column 8, line 46. Nevertheless, "the simple derivative is not suitable because it will give large values even for low amplitude noise" - see column 8, lines 47-49. Thus, the activity functions (23B, 25B) which are defined, roughly correspond to the curves (23A, 25A) filtered with a high-pass filter.

Therefore, an activity function in the meaning of Kerzner is not an average signal of a two-dimensional data set as described in the method of the invention. Consequently, Kerzner teach a method that substantially differs from the present invention

As a conclusion, amended claim 6 is allowable over the prior art and dependent claims 7 and 16-19 are also allowable for at least the same reasons.

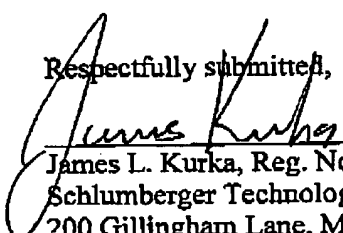
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Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Applicant believes this reply to be fully responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not hesitate to contact the undersigned at the telephone number listed below.

The Commissioner is authorized to charge any uncovered fee or any credits, to Deposit Account No. 50-2183 (Reference Number 21.0897).

Date: 11/7/06

Respectfully submitted,


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Attachments